

Application No. 09/848,112
Amt. dated Feb. 5, 2004
Reply to Office action of Aug. 11, 2003

Amendments to the Specification:

Please add the following new paragraphs:

On page 3, after the paragraph beginning with "Fig. 4":

B1 Fig. 4A is a section view taken along line 4A-4A of Fig. 4.

Fig. 4B is an isometric view of a ball pivot for use in one embodiment of the present invention.

Please replace the following paragraphs:

On page 6, please replace the paragraph beginning at line 11 with the following paragraph:

B2 The pivot axis formed by the pivot pin 54 attaching the first axle 50 to the pivot ball 56 is the first pivot axis 66. See Fig. 4A. The pivot axis defined by the pin 60 attaching the flanges 64 on the second axle 58 to the pivot ball 56 define the second pivot axis 68. The first 66 and second 68 pivot axes are positioned orthogonally with respect to one another in their attachment to the pivot ball 56. See Fig. 4A. The first pivot axis 66, with respect to Fig. 4, allows the handle bracket 40 to pivot about the first pivot axis 66 into and out of the plane of the page showing Fig. 4. In that instance, the flanges 62 on the first axle 50 pivot with respect to the pivot ball 56. The second pivot axis 68 formed between the flanges 64 on the second axle 58 formed by the connection of the flanges 64 of the second axle 58 and the pivot ball 56 allow the handle bracket 40 to pivot left and right about the second pivot axis 68 with respect to the orientation of Fig. 4. In this instance, the pivot ball 56 moves with respect to the flanges 64 of the second axle 58. The second end of the second axle 58 defines a recess 70 which receives an end of the third axle 72. The end of the third axle 72 is held within the recess 70 in the second end of the second axle 58 by a pin 74 extending therethrough. A third axle 72 is mounted to the arm 36 of the exercise machine in a rotatable manner by two bearings 76 positioned inside of a sleeve 78, through which the third axle 72 extends. The third axle 72 is held in position by a fastener [[78]] 79 extending from the opposite side of the exercise arm 36 into the opposite end of the third axle 72.

On page 7, please replace the paragraph beginning at line 21 and extending to line 15 of page 8, with the following paragraph:

133
Fig. 5 is an exploded view of the articulating and rotating handle 20A embodiment of the present invention. The handle 20A is attached in an articulating and rotating relationship with the exercise handle as described above. The exercise handle 20A defines a collar 78 into which is positioned two bearing structures 76, such as ball bearings. The ball bearing structures receive an end of the third axle 72 which is attached to the exercise arm 36 and inside the collar by a fastener ~~[[78]]~~ 79. The first end of the third axle 72 inserts into a recess 70 formed in the second end of the second axle 58 as held therein by a press fit pin 74. The first end of the second axle 58 is attached to the pivot ball 56. Two flanges 64 are formed at first end of the second axle 58 to surround the pivot ball 56. Each flange 64 defines an aperture 94 which is aligned with a corresponding aperture 96 formed in the pivot ball 56 to receive a pivot pin 60, or pins depending on the design, which forms the second pivot axis 68. The pivot ball 56 is attached to the second end of the first axle 50 in a similar manner. The second end of the first axle 50 defines two opposing flanges 62 which also define apertures 96 (in dash). These apertures 96 are positioned in alignment with apertures 98 formed in the pivot ball 56 and a pin 54 or pins are positioned through the apertures 96 in the flanges 62 on the second end of the first axle 50 to attach to the pivot ball 56 to form the first pivot axis 66. The first 66 and second 68 pivot axis are offset by 90° from one another. The first end of the first axle 50 is received within a recess formed by a collar 48 on the bottom 42 of the handle bracket 40. The first end of the first axle 50 is attached or secured within the collar 48 by a press fit pin 52. The grip handle 44 has an inner cylinder 100 and an outer cylinder 102, the outer cylinder 102 being made of a cushioning material and the inner cylinder 100 being made of a strong material. Either end of the gripping member 44 is fit over a bearing 47 through which is positioned a bolt 104 to hold the gripping 44 member to the handle bracket 40 in a rotating relationship.
